

Amendments to the Specification:

Please replace the paragraph extending from page 15, line 23 to page 16, line 30 with the following replacement paragraph

"The payload of spacecraft 22 of FIGURE 2 manages a number of downlink queues, each of which corresponds to one downlink spotbeam, corresponding to one downlink 26d. The payload monitors the status of the queues, and recurrently or periodically (with period N milliseconds) reports the status of the queues to the Network Control Center 218. This status information may be in the form of a statement of the current length of each queue or a statement of the change in length of the queue relative to the previous report, or both. The payload transmits the queue status information over a designated control channel on downlink 220d to the NCC, as a portion of the overall payload status. The status message is preferably encoded for privacy. The NCC 218 of FIGURE 2, upon receiving the payload queue status report(s), determines the existence of congestion by at least comparing the stack size with a predetermined reference level, and deeming congestion to exist if the stack size exceeds the threshold. Thus, a payload-congestion-representative signal is generated by the NCC 218. If a particular queue has been deemed to be congested, the NCC notifies (by way of uplinks and downlinks illustrated as a path 214) at

least the source terminals associated with the congested queue. Preferably, the notification is by way of a broadcast message over the control channels. When a broadcast message is used for communication, the message identifies the affected source terminals, so that other source terminals need not take any action. The broadcast ~~portion~~ portions of the control channel(s) may be, and preferably are, protected by proprietary encoding or encryption. Thus, the NCC has payload congestion information available to it, and this information is made available to the various source terminals."

Please replace the paragraph extending from page 21, line 5 to page 22, line 9 with the following replacement paragraph

"Similarly, the downstream ABR service ATM data signals flowing to the right from VS/VD switch 318 of FIGURE 3 pass successively through two standard routing switches designated 320 and 322, which sense congestion (if any) at their locations, and respond by imposing congestion-related information onto the forward Resource Management cells flowing therethrough in conjunction with the ABR service ATM data cells. When these forward Resource Management cells arrive at Virtual-Source/Virtual-Destination switch 324, it reads the cumulative congestion information associated with the forward-direction

Resource Management cells, and makes its own determination of congestion at its own site or location, and couples the combined information onto reverse or back Resource Management cells, which propagate in the upstream direction from VS/VD switch 324 back through switches 322 and 320, and through VS/VD switch 318. Thus, the return Resource Management cells leaving VS/VD switch 322 in the upstream direction, which arrive at VS/VD switch 318, include information about congestion which exists or has occurred in switches 320, 322, and 324, or in other words in second control loop 316. As with control loop 312, control loop 316 may include switches in addition to switches 320 and 322. VS/VD switch ~~312~~ 318 adds to, or imposes on, the congestion information on the return or back Resource Management cells its own assessment of the congestion occurring in first control loop 312, so that the back Resource Management cells reflect the congestion in both loops 312 and 316. VS/VD switch 318 sends the return Resource Management cells upstream toward source 12."